

REMARKS

This Amendment is being filed in response to the Final Office Action mailed on January 12, 2009 which has been reviewed and carefully considered. Entry of the present amendment and allowance of the present application in view of the amendments made above and the remarks to follow are respectfully requested.

Claims 1-11 remain in this application, where claim 12 had been previously canceled without prejudice. Claim 1 is independent.

In the Final Office Action, claims 1 and 7-11 are rejected under 35 U.S.C. §102(b) as allegedly anticipated by U.S. Patent Application Publication No. 2003/0214857 (Horie). Further, claims 1-12 are rejected under 35 U.S.C. §103(a) as allegedly unpatentable over Horie. It is respectfully submitted that claims 1-11 are patentable over Horie for at least the following reasons.

Horie is directed to a phase-change recording material used for information recording medium. Tables 3-6 provide various examples of layers of various thicknesses.

It is respectfully submitted that Horie does not disclose or suggest the present invention as recited in independent claim 1, which, amongst other patentable elements, recites (illustrative emphasis provided):

a substantially transparent second auxiliary layer I2 having a thickness $d_{i2} < 10\text{nm}$,
a recording layer of a phase-change material comprising a composition GexSnySbl-x-y , where $0.05 < x < 0.30$ and $0.15 < y < 0.30$, wherein the recording layer is directly on the second auxiliary layer I2 and is interposed between the first auxiliary layer I1 and the second auxiliary layer I2, and ...
wherein $\lambda_{i2}/d_{i2} > 5 \cdot 10^8 \text{ W m}^{-2} \text{ K}^{-1}$, where λ_{i2} is a heat conduction coefficient of the second auxiliary layer I2.

Horie is completely silent about requiring that the ratio between the heat conduction coefficient and thickness of a particular layer meet a particular criterion. There is simply no disclosure or suggestion in Horie of having $\lambda_{i2}/d_{i2} > 5 \cdot 10^8 \text{ W m}^{-2} \text{ K}^{-1}$, as recited in independent claim 1.

Further, Horie does not disclose or suggest that the recording layer is directly on the second auxiliary layer I2, where the thickness of the second auxiliary layer I2 is less than 10nm (i.e., $d_{i2} < 10\text{nm}$), as recited in independent claim 1. Rather, as correctly

noted on pages 2 and 4 of the Final Office Action, table 5 of Horie discloses that the thickness of the ZnS-SiO₂ layer is 17nm.

There is simply no thin auxiliary layer in Horie having a thickness of less than 10nm, where this thin (<10nm) auxiliary layer I2 is interposed between the recording layer and another auxiliary layer I3, and the recording layer is directly on this second auxiliary layer I2. This provides substantial benefits, and is contrary to what is known from prior art, that a relatively small thickness d_{I2} is advantageous for achieving high recording speeds, as described on page 5, lines 1-5 of the specification.


Accordingly, it is respectfully requested that independent claim 1 be allowed. In addition, it is respectfully submitted that claims 2-11 should also be allowed at least based on their dependence from independent claim 1 as well as their individually patentable elements.

In addition, Applicants deny any statement, position or averment of the Examiner that is not specifically addressed by the foregoing argument and response. Any rejections and/or points of argument not addressed would appear to be moot in view of the

presented remarks. However, the Applicants reserve the right to submit further arguments in support of the above stated position, should that become necessary. No arguments are waived and none of the Examiner's statements are conceded.

In view of the above, it is respectfully submitted that the present application is in condition for allowance, and a Notice of Allowance is earnestly solicited.

Respectfully submitted,

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